Plant Science, 86 (1992) 229–230
Elsevier Scientific Publishers Ireland Ltd.

Contents

Volume 86 (1992)

PHYSIOLOGY AND BIOCHEMISTRY

Evaluation of contrasting cellular-level acclimation responses to leaf water deficits in three wheat genotypes
D. Gunasekera and G.A. Berkowitz (New Brunswick, NJ) 1–12

Formation of abnormal hypermodified nucleotides on plant DNA upon xenobiotic action
F. Weber-Lotfi, A. Pfohl-Leszkowicz, G. Keith, D.T.N. Pillay, A. Dietrich, B. Rether and P. Guillemaut (Strasbourg, France; Windsor, Ont., Canada) 13–19

Energy-dependent reactions supported by several substrates in coupled *Euglena gracilis* mitochondria
A. Uribe and R. Moreno-Sánchez (México, Mexico; Philadelphia, PA) 21–32

Developmental changes in carbohydrate concentration and activities of sucrose metabolizing enzymes in fruits of two *Capsicum annuum* L. genotypes
N.L. Hubbard and D. Mason Pharr (Raleigh, NC) 33–39

Effect of boron on plasma membrane proton extrusion and redox activity in sunflower cells
N. Ferrol and J.P. Donaire (Granada, Spain) 41–47

Blockade of the K^+ channel of *Chara contraria* by Cs^+ and tetraethylammonium resembles that of K^+ channels in animal cells
L.P. Zanello and F.J. Barrantes (Bahia Blanca, Argentina) 49–58

Biosynthesis and localisation of storage proteins, oleosins and lipids during seed development in *Coriandrum sativum* and other *Umbelliferae*
J.H.E. Ross and D.J. Murphy (Norwich, UK) 59–70

GENETICS AND MOLECULAR BIOLOGY

Molecular cloning and characterization of a cDNA encoding a water stress protein (WSP23) from wheat roots
C.P. Joshi, S.W. King and H.T. Nguyen (Lubbock, TX) 71–82

CELL AND TISSUE STUDIES IN VITRO

Plant regeneration from protoplasts isolated from primary callus of four japonica rice (*Oryza sativa* L.) varieties
C. Wu and F.J. Zapata (Manila, Philippines) 83–87

Anther and microspore culture of *Hordeum vulgare* L. cv. Igri
S. Hoekstra, M.H. van Zijderveld, J.D. Louwerse, F. Heidekamp and F. van der Mark (Leiden, The Netherlands) 89–96

Advances in haploid plant induction in onion (*Allium cepa* L.) through in vitro gynogenesis
B. Campion, M.T. Azzimonti, E. Vicini, M. Schiavi and A. Falavigna (Milan, Italy) 97–104

Nurse culture of Japanese radish (*Raphanus sativus* L.) mesophyll protoplasts
M. Hagimori and M. Nagaoka (Mie, Japan) 105–113

GENERAL

Isolation of synaptonemal complexes from lily microsporocytes
T. Ohyama, Y. Iwaikawa, T. Kobayashi, Y. Hotta and S. Tabata (Nagoya, Japan) 115–124

PHYSIOLOGY AND BIOCHEMISTRY

Characterization of the UDP-glucose: (1,3)-β-glucan (callose) synthase from plasma membranes of celery: polypeptide profiles and photolabeling patterns of enriched fractions suggest callose synthase complexes from various sources share a common structure
R.M. Slay, A.E. Watada, D.J. Frost and B.P. Wasserman (Beltsville, MD; New Brunswick, NJ) .. 125–136

Extracellular protein patterns of grapevine cell suspensions in embryogenic and non-embryogenic situations
P. Coutos-Thevenot, O. Maes, T. Jouenne, M.C. Mauro, M. Boulay, A. Deloire and J. Guern (Gif-sur-Yvette, Epernay and Colombes, France) 137–145

Cytokinins in a normal line and the *ogura (ogu)* cytoplasmic male-sterile line of rapeseed (*Brassica napus*)
S. Singh and V.K. Sawhney (Saskatchewan, Canada) 147–154
Fusarium avenaceum as a novel pathogen of spotted knapweed and its phytotoxins, acetamido-butenolide and enniatin B
J. Hershenhorn, S.H. Park, A. Stierle and G.A. Strobel (Bozeman, MT) 155–160
Involvement of phytohormones in light-induced adventitious shoot formation of horseradish hairy roots
T. Saitou, H. Kamada and H. Harada (Ibaraki, Japan) 161–166
A theoretical study of the light microenvironment in a leaf in relation to photosynthesis
L. Fukshansky and A. Martinez v. Remisowsky (Freiburg, Germany) 167–182
Inhibition of pyrophosphate:fructose-6-phosphate 1-phosphotransferase by imidodiphosphate
E.G. Rowntree and N.J. Kruger (Oxford, UK) 183–189

GENETICS AND MOLECULAR BIOLOGY
Expression of a chimeric neomycin phosphotransferase II gene in first and second generation transgenic rice plants
M. Battraw and T.C. Hall (College Station, TX) 191–202

CELL AND TISSUE STUDIES IN VITRO
Somatic hybridization between *Lycopersicon esculentum* and non-tuberous *Solanum* species of the *Etuberosa* series
T.A. Gavrilenko, N.I. Barbakar and A.V. Pavlov (St. Petersburg, Russia; Kishinev, Moldova) 203–214
A genotype-independent system of regeneration from cotyledons of sunflower (*Helianthus annuus* L.). The role of ethylene
K.M.B. Chraibi, J.-C. Castelle, A. Latche, J.-P. Roustan and J. Fallot (Toulouse, France) 215–221

Book Review 223–224
Subject Index Volume 86 (1992) 225–226
Author Index Volume 86 (1992) 227
Contents Volume 86 (1992) 229–230